

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.

Paper No. 20

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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Ex parte YUUJI SAKA and TAKAHIRO ONIZUKA

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Appeal No. 1999-0304  
Application No. 08/520,606

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ON BRIEF

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Before BARRETT, DIXON, and GROSS, Administrative Patent Judges.

GROSS, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal from the examiner's final rejection of claims 1 through 20, which are all of the claims pending in this application.

Appellants' invention relates to an electric current distribution system for automotive vehicles. A fusible link is connected between the vehicle's battery and an input terminal to a junction box, and a grounding element is

connected to a crash sensor and between the input terminal and ground. The grounding element responds to a signal from the crash sensor to ground the input terminal causing excess current to flow through and break the fusible link cutting off current to the junction box. Claim 1 is illustrative of the claimed invention, and it reads as follows:

1. An electric current distribution system, particularly for powering a plurality of loads such as lamps, motors, and ignition systems in automotive vehicles, comprising:

a junction box (5) having

an input terminal connected with an electric power source (1;3) for providing power to said junction box, and a plurality of output terminals electrically coupled to the input terminal and connected respectively with said loads (7) for providing power to said loads,

a fusible link (4) connected between the input terminal of the junction box (5) and the power source (1;3), and

earthing means (10;12) comprising a grounding element connected between the input terminal and ground and acting in response to a direct signal from a crash sensor to immediately earth the input terminal of the junction box (5) causing excess current to flow through and break the fusible link (4) cutting off power to the input terminal, the output terminals and said loads.

The prior art references of record relied upon by the examiner in rejecting the appealed claims are:

Appeal No. 1999-0304  
Application No. 08/520,606

Iwata 1973	3,743,849	Jul. 03,
Caiati et al. (Caiati) 1973	3,781,824	Dec. 25,

Appellants' admitted prior art shown in appellant's Figure 3 and described on pages 1-2 of the specification. (AAPA)

Claims 1 through 20 stand rejected under 35 U.S.C. § 103 as being unpatentable over AAPA in view of Iwata and Caiati.

Reference is made to the Examiner's Answer (Paper No. 12, mailed September 12, 1997) for the examiner's complete reasoning in support of the rejection, and to appellants' Brief (Paper No. 10, filed June 9, 1997) and Reply Brief (Paper No. 13, filed November 10, 1997) for appellants' arguments thereagainst.

#### OPINION

We have carefully considered the claims, the applied prior art references, and the respective positions articulated by appellants and the examiner. As a consequence of our review, we will reverse the obviousness rejection of claims 1 through 20.

The examiner asserts (Answer, pages 4-5) that AAPA discloses everything except the disconnection of power to loads upon sensing of a crash, that Iwata discloses

immediately disconnecting power to loads upon sensing of a vehicle crash, but not by blowing a fuse, and that Caiati discloses "[u]pon sensing of a crash, the earthing means 66 is activated (or gated ON) by a signal from a crash sensor causing excess current to flow through and break the fusible link 58 cutting off power 54 to the input terminal (the junction of fuse 58 and resistor 60)." The examiner concludes (Answer, page 6) that it would have been obvious in view of Iwata and Caiati to perform immediate disconnection of power from loads by blowing a fuse in AAPA.

In the Reply Brief (pages 3-4) appellants explain that the background of the invention discusses prior art methods of cutting off power to a load upon sensing a crash and that as Iwata merely discloses a different method of doing the same, it adds nothing to AAPA. Appellants argue (Brief, pages 12 and 13) that Caiati teaches fusing an element in an automotive electrical system to disable the crash recorder after it has fulfilled its function, not immediately upon sensing a crash as recited in the claims. Furthermore, appellants contend (Brief, page 16) that Caiati's crash sensor is not directly connected to the grounding element. Thus, Caiati's structure

and function differs from the claimed invention. We agree with appellants.

Caiati discloses (column 6, lines 13-17 and 55-61) that:

[w]hen the contents of the shift register **48** have been read into the memory system **52**, . . . the memory address counter and decoder **51** supplies a shutdown enable signal SDE to the power supply **32** which is disabled thereby to prevent any further information from being monitored by the solid state crash recorder.

. . . .

. . . When the shutdown enable signal SDE is generated, the SCR **66** is gated on to short the battery to ground through the fuse **58**. The current through the fuse **58** is sufficient to cause it to open the circuit from the DC voltage source **54**. Consequently, the solid state crash recorder is thereafter disabled.

In other words, the grounding element is not directly connected to a crash sensor nor does it act in response to a direct signal from a crash sensor, as recited in the claims. Instead, the grounding element receives an enable signal from memory and address counter and decoder 51, and the signal is received only after the contents of the shift register 48 have been read into memory. Accordingly, Caiati's structure and

Appeal No. 1999-0304  
Application No. 08/520,606

the function thereof clearly differ from the claimed invention.

Appellants also argue (Brief, pages 18, 21, and 22 and Reply Brief, page 5) that the examiner has provided no explanation or suggestion in the references as to how and why the modifications necessary to arrive at the claimed invention could be done. Appellants accuse the examiner (Reply Brief, pages 4, 5, and 7) of engaging in impermissible hindsight, as the examiner has resorted to picking and choosing elements from the prior art with no suggestion as to how to combine them to form the claimed invention. Again, we agree with appellants.

For a rejection under 35 U.S.C. § 103, the examiner is required to provide a reason from some teaching, suggestion or implication in the prior art as a whole, or knowledge generally available to one of ordinary skill in the art, why one having ordinary skill in the pertinent art would have been led to modify the prior art to arrive at the claimed invention. *Uniroyal, Inc. v. Rudkin-Wiley*, 837 F.2d 1044, 1052, 5 USPQ2d 1434, 1438 (Fed. Cir. 1988), *cert. denied*, 488

Appeal No. 1999-0304  
Application No. 08/520,606

U.S. 825 (1988). These showings by the examiner are an essential part of complying with the burden of presenting a *prima facie* case of obviousness. *Note In re Oetiker*, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992).

Furthermore, "[o]bviousness may not be established using hindsight or in view of the teachings or suggestions of the inventor." *Para-Ordnance Mfg., Inc. v. SGS Importers Int'l, Inc.*, 73 F.3d 1085, 1087, 37 USPQ2d 1237, 1239 (Fed. Cir. 1995), citing *W.L. Gore & Assocs., Inc. v. Garlock, Inc.*, 721 F.2d 1540, 1551, 1553, 220 USPQ 303, 311, 312-13 (Fed. Cir. 1983).

Here the examiner has pointed to a structure, Caiati's, with similar components to those claimed and concluded that it would have been obvious to combine it with AAPA, with no suggestion in the references as to how, where, or why one would connect the various elements in the structure of AAPA. The examiner has not analyzed the prior art to determine the differences, and has not pointed to any teachings or suggestions in the references as to how and why to combine the references. The claims require a specific arrangement of the

Appeal No. 1999-0304  
Application No. 08/520,606

sensor, the grounding element, the battery, and the fusible link, and that arrangement is not taught or suggested by Caiati and Iwata. The only possible explanation for the combination clearly involves impermissible hindsight. Thus, the examiner has failed to establish a *prima facie* case of obviousness. Consequently, we cannot sustain the obviousness rejection of claims 1 through 20.

CONCLUSION

The decision of the examiner rejecting claims 1 through 20 under 35 U.S.C. § 103 is reversed.

REVERSED

LEE E. BARRETT	)	
Administrative Patent Judge	)	
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	)	
	)	
	)	BOARD OF PATENT
JOSEPH L. DIXON	)	APPEALS
Administrative Patent Judge	)	AND
	)	INTERFERENCES
	)	
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ANITA PELLMAN GROSS	)	
Administrative Patent Judge	)	



Appeal No. 1999-0304  
Application No. 08/520,606

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Appeal No. 1999-0304  
Application No. 08/520,606

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